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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _08 March 2004_.

2a)☐ This action is **FINAL**.　　2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
　　closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-30_ is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-30_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some *　c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage

　　　　application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 U.S.C. ɔ 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in-
(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

2.   **Claims 1-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Sim**

(5213880).

3.   **As in claim 1, Sim teaches of** a system for mapping an input device's controls with an

application, **figures 2-4**, comprising: a user input device having a plurality of controls,

column 5 lines 9-15; an application that implements actions in response to activation of

the controls of the user input device, **column 4 lines 55-60, figure 4 item 366**; and an

API that receives calls from the application, **column 6 lines 15-25, figure 4 item 430,**

bidirectional communication between (366 or 332) and 430, as controlled by

gamepad 100, the API including a call that creates an association between actions in the

application and the controls on the input device, **column 6 lines 34-48**, wherein creating

the association comprises considering semantics related to the actions in the application,

column 2 lines 1-10, column 5 lines 25-43, column 7 lines 35-40. Wherein the Direct

Input Interface 430 specifies the protocol for input devices to communicate with

application modules or the operating system.

4.   **As in claim 22, Sim teaches of** method of communicating between an input device and

an application in a system, **figures 2-4**, comprising: (a) issuing, from the application, a

call to enumerate a suitability of input devices installed in the system, the call including

an array of actions that the application uses, **column 5 lines 45-65, column 6 lines 1-30**;

(b) in response to the application call, examining the input devices installed on the system

by comparing controls on the input devices with actions used by the application, **column**

6 lines 1-30; ranking the input devices based on the comparison, **column 6 lines 1-10**;

and (d) providing the application with at least the highest ranked input device that most

closely matches the actions of the application, **column 6 lines 1-30**. Wherein each input

device 100 is given a unique identifier GUID or ranking based on function such as

joystick or mouse emulation by calling the EnumDevices function. If the computer

already has a mouse as an input device, the mouse input device is given priority for

mouse functions, then EnumDevices is used to enumerate the mouse embodiments of the

input device 100.

5.   **As in claim 27, Sim teaches of** method for mapping an input device's controls with an

application in a system, column 6 lines 30-45, comprising: in response to a request from

an application program to create an action-to-control mapping, reading stored user

preferences for the action-to-control mapping and reading a stored default file that includes manufacture provided defaults for the action-to-control mapping, **column 6 line 60, column 7 lines 39-41, 50-67, column 8 lines 1-17**; reading a structure that includes action values and action semantics associated with the action values, the action values being defined by the application, **column 7 line 50-67, column 8 lines 1-17**, and using the stored user preferences and the stored default file to create an association between the action values associated with the application and the controls on the input device, **column 7 line 50-67, column 8 lines 1-17, column 10 lines 1-25. Wherein the DVD game application allows programmable keymaps to be created and linked to the application in addition to the default keymaps stored on the DVD disk, wherein both user preference created keymaps and default keymaps operate in conjunction.**

6.   **As in claim 30,** Sim teaches of a computer-readable medium including computer-executable instructions to perform a method for using a computer input device with a software application, **figure 4 items 366 and 332**, comprising: an API, **figure 4 item 430**, responsive to a call from an application, that returns an enumeration of input devices that substantially match the actions of the application, **column 5 lines 45-65, column 6 lines 1-30**; and an API, responsive to a call from the application, that uses one of the enumerated input devices selected by the application to build an action-to-control mapping, **column 5 lines 45-65, column 6 lines 1-30, column 7 lines 18-29.** Wherein keymaps are created for mouse, keyboard, and joystick input devices. The game pad 100 may function as a mouse and a keyboard as defined by the keymaps created and/or

stored. Wherein each input device 100 is given a unique identifier GUID or ranking based on function such as joystick or mouse emulation by calling the EnumDevices function. If the computer already has a mouse as an input device, the mouse input device is given priority for mouse functions, then EnumDevices is used to enumerate the mouse embodiments of the input device 100.

7.   **As in claim 2, Sim teaches of**, wherein the application can override the association created by the API, column 6 lines 1-6, wherein mouse input can override the gamepad mouse input. **As in claim 3, Sim teaches of**, wherein an action is an application behavior resulting from a user's operation of a control, column 6 lines 17-20 and 34-50. **As in claim 4, Sim teaches of**, wherein creating the association further includes linking a control-semantic set to an action-semantic set by way of a genre, wherein the genre is a set of actions common to applications of a similar type, column 5 lines 40-44, wherein keymap files may be used to define commands for specific games, said games representing applications of a similar type. **As in claim 5, Sim teaches of**, wherein the API considers user preferences in creating the association, column 6 lines 34-65, column 7 lines 39-41. **As in claim 6, Sim teaches of**, wherein the API considers information provided from the device manufacturer in creating the association, column 3 lines 14-18, figure 3 item 362 and 370, wherein default keymaps are contained within the disk, figure 3, figure 4 item 332 . **As in claim 7, Sim teaches of**, wherein the API considers similar applications that a user has configured to determine the association between an action and a given device control, column 5 lines 40-44. **As in claim 8, Sim teaches of**, wherein

the API binds actions of the application to semantics in a genre by using a structure

having an action value, column 5 lines 40-44, a predefined action semantic associated

with the action value, and a label for the action, column 5 lines 40-44. **As in claim 9,**

Sim teaches of, wherein the application passes a structure to the API that includes an

action value and an action semantic associated with the action value, column 6 lines 5-34.

As in claim 10, Sim teaches of, wherein the API returns to the application an

enumeration of input devices connected to the system that match the actions of the

application, column 5 lines 45-67, column 7 lines 1-30. **As in claim 11, Sim teaches of,**

wherein in response to an application call, the API examines all input devices connected

to the system and invokes an application-defined callback function to enumerate the

connected devices that match the application actions, column 5 lines 45-67, column 7

lines 1-30. **As in claim 12, Sim teaches of,** wherein the application receives its own

application codes as incoming input device data, figure 3 item 316. **As in claim 13, Sim**

teaches of, wherein the API ranks input devices based on suitability of actions of the

application, column 5 lines 45-67, column 7 lines 1-30. **As in claim 14, Sim teaches of,**

further including an API call to display a default input device configuration, column 6

lines 34-62, column 8 lines 1-16. **As in claim 15, Sim teaches of,** further including

automatically obtaining system information about input devices connected in the system,

retrieving custom settings provided by the user, and rendering the user interface for input

devices using system information and custom settings, column 5 lines 45-67, column 7

lines 1-30. **As in claim 16, Sim teaches of** further including building an action map,

column 5 lines 14-20, column 5 lines 45-67, column 7 lines 1-30. **As in claim 17, Sim**

teaches of further including setting the action map after it is built, column 5 lines 45-67, column 7 lines 1-30. **As in claim 18, Sim teaches of,** wherein setting the action map includes mapping physical controller codes of the input device to physical application codes, column 5 lines 45-67, column 7 lines 1-30. **As in claim 19, Sim teaches of** wherein building an action map includes obtaining information about user preferences and hardware manufacturer defaults to create the association between actions and device controls, column 6 line 60, column 7 lines 39-41, 50-67, column 8 lines 1-17. **As in claim 20, Sim teaches of** wherein the application is a game application, column 1 lines 12-18. **As in claim 21, Sim teaches of** wherein the input device includes a mouse, keyboard, game controller, force feedback device, or combinations thereof, figure 4 items 403, 100, 401. **As in claim 23, Sim teaches of,** wherein the input device received by the application is advisory and the application selects the desired input device, column 6 lines 1-10. **As in claim 24, Sim teaches of,** further including building an action map that includes a mapping of actions to controls for a selected device, column 45-65, column 7 lines 30-41. **As in claim 25, Sim teaches of,** further including setting the action map, column 6 lines 34-65. **As in claim 26, Sim teaches of,** further includes configuring the user interface, column 5 lines 45-67. column 6 lines 1-20. . **As in claim 28, Sim teaches of** wherein the creating includes creating a control to action map and further including setting the action map to allow the application to receive data from the input device, column 6 lines 13-48. **As in claim 29, Sim teaches of** further including, in response to a request from the application, enumerating input devices attached to the system that are most suitable to the application, **column 5 lines 45-65, column 6 lines 1-30.**

8.   Claims 1, 20, and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by

McCauley (6263392).

9.   **As in claim 1, McCauley teaches of** a system for mapping an input device's controls

with an application, comprising: a user input device having a plurality of controls,

column 6 lines 22-35; an application that implements actions in response to activation of

the controls of the user input device, **column 8 lines 52-55**; and an API that receives calls

from the application, **column 7 lines 34-35**, the API including a call that creates an

association between actions in the application and the controls on the input device,

column 6 lines 1-6, column 7 line 67 to column 8 line 2, wherein creating the

association comprises considering semantics related to the actions in the application,

column 3 lines 1-21. Wherein a game player using a peripheral input device controller

engages the game program of the host PC 4, via the transmission of the HID reports

across the USB. The interface controller continuously monitors the USB for periodic

receipt of information from the host PC. When an input device is plugged into the arcade

game system, it is identified as a specific type of device (i.e. trackball), and interface

system thereafter generates a trackball report which is an association between actions in

the game application and the controls of the input device. This generated association

report is based on the interface controller monitoring calls from the host PC, to carry out

game program functions. As shown in column 3 lines 1-50, McCauley teaches of

peripheral state information, **equivalent to said Semantic**, which is indicative of an

instantaneous mechanical position of an input device element. As in known in the art and
supported by the prior art of record, the peripheral state information is provided for
within an HID report descriptor, produced by the input device (HID). The data structure
of the peripheral state information is generally arranged as an array of **data item
descriptions**, corresponding to individual button type controls, value type controls, or
arrayed data items. More specifically the data item descriptions within the peripheral
state information are equivalent to said semantic. The Applicant defines a semantic as "a
**label that expresses a behavior that an application exhibits upon operation of a
control**". Operation of the HID produces a data structure with a report descriptor having
a label that expresses a behavior that an application exhibits, corresponding to an
instantaneous mechanical position of an input device element, whereby each element of
the data structure contains a description of a control, equivalent to said semantic.
McCauley teaches of a library of pre-defined peripheral device archetypes, **equivalent to
said Genres**, wherein an interpretive software system interprets the semantic or
peripheral state information produced by the input device and sends it to the application
as HID report descriptors of a specific genre for application processing. While McCauley
does not detail specific labels for said semantics, such as control button 1 pushed, control
lever 2 pulled, or joystick trigger pulled, such a limitation would obviously be inherent to
the teaching due to the fact that input device use is translated to genre specific HID report
descriptors, and the transmissions of the HID reports across the USB allows the game
player to engage a game program of the host PC. The engagement of the game programs
require a semantic for translation/interpretation of the plurality of specific peripheral

devices, wherein for example a semantic corresponding to pulling a joystick trigger maps to a game specific genre control signal within a program application, different from another game specific control signal within a program application.

10.   **As in claim 20, McCauley teaches of** wherein the application is a game application, column 8 lines 51-55.

11.   **As in claim 22, McCauley teaches of** method of communicating between an input device and an application in a system, comprising: (a) issuing, from the application, a call to enumerate a suitability of input devices installed in the system, the call including an array of actions that the application uses, **column 1 lines 40-55, column 3 lines 15-20** ; (b) in response to the application call, examining the input devices installed on the system by comparing controls on the input devices with actions used by the application, **column 3 lines 1-15, column 4 lines 1-15**; 8 ranking the input devices based on the comparison, **column 3 lines 28-50, column 4 lines 1-15**; and (d) providing the application with at least the highest ranked input device that most closely matches the actions of the application, **column 9 lines 55-67**. Wherein the ranking features are inherent to the plug and play apparatus and method for interfacing multiple peripheral devices to a host computer given the HID and USB standards. Wherein ranking is on the basis of HID class or type of the peripheral device sensed, further wherein HID report descriptors corresponding to the device are created and transmitted to the host computer during the enumeration process cycle. A highest ranked input device is signified by the sensed and

identified input device causing HID report descriptors to be produced of a particular

ranked archetype when the reading of peripheral state information of certain peripheral

devices by a control module, where the peripheral state information may be indicative of

instantaneous input device actuation.   The transmission of the HID reports across a USB

allows the game player to engage a game program of the host PC, wherein an interface

controller monitors the USB for periodic receipt of communication from the game

program application, as found in claim 22.   The Examiner has given a broadest

interpretation to the term ranking.   The input devices are ranked by their distinct

addresses given at the period in time sensed to be connected to the interface, wherein

given the HID and USB based system standards, said ranking features are inherent to a

plug and play system design.

12.   **Claims 1-3, 5-19, and 21-30 are rejected under 35 U.S.C. 102(e) as being anticipated**

        by Chan et al. (5991546).

13.   **As in claim 1, Chan et al. teaches of** a system for mapping an input device's controls

        with an application, **column 1 lines 20-28,** comprising: a user input device having a

        plurality of controls, **column 2 lines 50-55, column 5 lines 50-65**; an application that

        implements actions in response to activation of the controls of the user input device,

        column 2 lines 43-50, column 5 lines 35-50, wherein inherent to said host device 16

        are software/applications for processing computer data requests as well known; and

        an API that receives calls from the application, **figure 1 item 6/20,** the API including a

call that creates an association between actions in the application and the controls on the input device, **column 3 line 55-59, column 5 lines 14-40, column 3 line 30-45,** wherein creating the association comprises considering semantics related to the actions in the application, **column 5 lines 10-21 and 50-65, column 6 lines 30-45.** The device of Chan uses the reporting capabilities in the USB interface to notify the host 16 when USB compliant and noncompliant devices are coupled to the interface 20. Wherein EEPROM 24 stores sets of key code maps which are vendor specific and maps the keycodes of the detected keys to their corresponding HID values. This map information is stored in a configuration table and is user configurable. The map information comprises control descriptions mapping to corresponding input keycodes to their HID values, and therefore reads on the claimed semantics. As is known and argued above operation of the HID produces a data structure with a report descriptor having a label that expresses a behavior that an application exhibits, corresponding to an instantaneous mechanical position of an input device element, here a keyboard or mouse, whereby each element of the data structure contains a description of a control, equivalent to said semantic. Further, each vendor specific map is equivalent to a genre, as well as each HID device classified into archetypes within the USB standard.

14.   **As in claim 2, Chan et al. teaches of,** wherein the application can override the association created by the API, column 6 lines 30-43. **As in claim 3, Chan et al. teaches of,** wherein an action is an application behavior resulting from a user's operation of a control, column 5 lines 15-20. **As in claim 5, Chan et al. teaches of,** wherein the API

considers user preferences in creating the association, column 6 lines 30-45. **As in claim 6, Chan et al. teaches of,** wherein the API considers information provided from the device manufacturer in creating the association, column 6 lines 30-45. **As in claim 7, Chan et al. teaches of,** wherein the API considers similar applications that a user has configured to determine the association between an action and a given device control, column 5 lines 50-65. **As in claim 8, Chan et al. teaches of,** wherein the API binds actions of the application to semantics in a genre by using a structure having an action value, a predefined action semantic associated with the action value, and a label for the action, column 5 lines 5-65, column 6 lines 30-45, as applied above to claim 4. **As in claim 9, Chan et al. teaches of,** wherein the application passes a structure to the API that includes an action value and an action semantic associated with the action value, column 5 lines 5-65, column 6 lines 30-45. **As in claim 10, Chan et al. teaches of,** wherein the API returns to the application an enumeration of input devices connected to the system that match the actions of the application, column 2 lines 10-16, column 5 lines 34-50, wherein as well known and provided by the USB Specification, the USB hub dynamically identifies (plug and play) input devices attached to its port whereby the system software must accommodate dynamic changes in the physical bus topology. **As in claim 11, Chan et al. teaches of,** wherein in response to an application call, the API examines all input devices connected to the system and invokes an application-defined callback function to enumerate the connected devices that match the application actions, column 2 lines 10-16, column 5 lines 34-50. **As in claim 12, Chan et al. teaches of,** wherein the application receives its own application codes as incoming input device data,

column 5 lines 34-50. **As in claim 13, Chan et al. teaches of,** wherein the API ranks

input devices based on suitability of actions of the application, column 2 lines 10-17,

column 5 lines 34-50, wherein the USB standard allows for plug and play dynamic

connections, wherein the USB hub registers each connected device and provides a unique

address for the device, ranking the device according to function. **As in claim 14, Chan**

et al. teaches of, further including an API call to display a default input device

configuration, column 3 lines 55-60, column 6 lines 30-45. **As in claim 15, Chan et al.**

teaches of, further including automatically obtaining system information about input

devices connected in the system, retrieving custom settings provided by the user, and

rendering the user interface for input devices using system information and custom

settings, column 2 lines 10-17, column 3 lines 55-60, column 6 lines 20-45. **As in claim**

16, Chan et al. teaches of further including building an action map, column 5 lines 14-

20. **As in claim 17, Chan et al. teaches of** further including setting the action map after

it is built, column 6 lines 30-45. **As in claim 18, Chan et al. teaches of,** wherein setting

the action map includes mapping physical controller codes of the input device to physical

application codes, column 5 lines 14-20. **As in claim 19, Chan et al. teaches of** wherein

building an action map includes obtaining information about user preferences and

hardware manufacturer defaults to create the association between actions and device

controls, column 6 lines 30-45. **As in claim 21, Chan et al. teaches of** wherein the input

device includes a mouse, keyboard, game controller, force feedback device, or

combinations thereof, column 6 lines 50-65.

15.   **As in claim 22, Chan et al. teaches of** method of communicating between an input

device and an application in a system, comprising: (a) issuing, from the application, a call

to enumerate a suitability of input devices installed in the system, the call including an

array of actions that the application uses, **column 2 lines 43-50, column 5 lines 34-50,**

wherein the call checks for keyboard, mouse, or HID suitability, said mouse,

keyboard, or HID having a plurality of code inputs being represented in report

descriptors; (b) in response to the application call, examining the input devices installed

on the system by comparing controls on the input devices with actions used by the

application, **column 5 lines 34-50, column 5 lines 30-45, wherein the semantic**

mapping codes stored in EEPROM 24 configuration table map input devices with

actions used by the application; 8 ranking the input devices based on the comparison,

column 3 lines 20-30, column 5 lines 35-46, wherein the ranking is based on the

request such that a response is received from the device ranked for a request by the

host 16, if the request is for data from a specific device, the host responds with any

device reports; and (d) providing the application with at least the highest ranked input

device that most closely matches the actions of the application, **column 3 lines 20-30,**

column 5 lines 35-50, the host is sent the device reports via the USB based on the

device ranked for request by the host.   Wherein the serial EEPROM not only maps

input data to HID data based on a priority of input device signal activation, it also

operates to exchange information from the input device to the host with a unique

handshake protocol which prevents conflicts when accessing the EEPROM for other

input device information or the like. Each input device, is ranked with a unique address

according to the USB standard, and further priority ranked according to a first to be

activated, first to be processed system via the serial EEPROM.

16.   **As in claim 23, Chan et al. teaches of**, wherein the input device received by the

application is advisory and the application selects the desired input device, column 5 lines

34-50. **As in claim 24, Chan et al. teaches of**, further including building an action map

that includes a mapping of actions to controls for a selected device, column 3 lines 23-27,

55-60. **As in claim 25, Chan et al. teaches of**, further including setting the action map,

column 6 lines 30-45. **As in claim 26, Chan et al. teaches of**, further includes

configuring the user interface, column 6 lines 30-45. **As in claim 29, Chan et al. teaches**

of further including, in response to a request from the application, enumerating input

devices attached to the system that are most suitable to the application, column 2 lines 5-

18, column 5 lines 34-64, wherein the said feature is inherent to the USB plug and play

standard, in conjunction with said serial EEPROM, wherein requests are made to the

input devices, which respond to the requests with device reports depending which device

is suitable to transmit said device reports.

17.   **As in claim 27, Chan et al. teaches of** method for mapping an input device's controls

with an application in a system, column 6 lines 30-45, comprising: in response to a

request from an application program to create an action-to-control mapping, **column 5**

lines 14-50, reading stored user preferences for the action-to-control mapping and

reading a stored default file that includes manufacture provided defaults for the

action-to-control mapping, **column 6 line 30-45**; reading a structure that includes action

values and action semantics associated with the action values, the action values being

defined by the application, **column 3 lines 55-65, column 5 lines 14-21, column 6 lines**

30-45, and using the stored user preferences and the stored default file to create an

association between the action values associated with the application and the controls on

the input device, **column 6 lines 30-45**. Wherein said EEPROM 24 stores semantic

mappings in a configuration table. **As in claim 28, Chan et al. teaches of** wherein the

creating includes creating a control-to-action map and further including setting the action

map to allow the application to receive data from the input device, column 5 lines 34-64,

column 6 lines 30-45.

18.   **As in claim 30, Chan et al. teaches of** a computer-readable medium including

computer-executable instructions to perform a method for using a computer input device

with a software application, **column 3 lines 15-30, column 2 lines 43-50, column 5 lines**

35-50, wherein inherent to said host device 16 are software/applications for

processing computer data requests as well known, comprising: an API, **figure 1 item**

20, responsive to a call from an application, that returns an enumeration of input devices

that substantially match the actions of the application, **column 5 lines 35-65**; and an API,

responsive to a call from the application, that uses one of the enumerated input devices

selected by the application to build an action-to-control mapping, **column 5 lines 5-21**.

Wherein the serial EEPROM operates to exchange information from the peripheral input

device to the host via the USB with a unique handshake protocol which prevents conflicts

when accessing the EEPROM which contains semantic mappings in the form of a

configuration table for the various input devices.

Claim Rejections - 35 U.S.C. ə 103

19.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set
forth in section 102 of this title, if the differences between the subject matter sought to be patented and
the prior art are such that the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

20.   **Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCauley**

(6263392) in view of Chan et al. (5991546).

21.   **As in claim 27, McCauley teaches of** method for mapping an input device's controls

with an application in a system, **column 3 lines 1-21, column 8 lines 53-56,** comprising:

in response to a request from an application program to create an action-to-control

mapping, **column 3 lines 1-15, column 8 lines 53-55;** reading a structure that includes

action values and action semantics associated with the action values, the action values

being defined by the application, **column 4 lines 1-15, column 3 lines 28-50.** Wherein

an interpretive software module of the host computer system software contains and uses a

library of pre-defined peripheral device archetypes, data structure building rules and

signal handling protocols, which serve to map an input device control manipulation

signal to a HID report descriptor communicated to a game application. **However McCauley does not explicitly teach of** reading stored user preferences for the action-to-control mapping and reading a stored default file that includes manufacture provided defaults for the action-to-control mapping, and using the stored user preferences and the stored default file to create an association between the action values associated with the application and the controls on the input device. **Chan et al. teaches of** reading stored user preferences for the action-to-control mapping and reading a stored default file that includes manufacture provided defaults for the action-to-control mapping, **column 6 lines 30-45**, and using the stored user preferences and the stored default file to create an association between the action values associated with the application and the controls on the input device, **column 3 lines 17-30, 55-60**. Wherein Chan et al. teaches of what McCauley is silent on, in a system and method of interfacing peripheral devices to a computer universal serial bus. **Therefore it would have been obvious** to the skilled artisan at the time of the invention to utilize with the device as taught by McCauley, stored user preferences for the action-to-control mapping and reading a stored default file that includes manufacture provided defaults for the action-to-control mapping, and using the stored user preferences and the stored default file to create an association between the action values associated with the application and the controls on the input device, as suggested by Chan et al., because Chan et al. suggests user preferences would be useful in a system as designed by McCauley with the intent of interfacing peripheral devices to a computer universal serial bus, as found in claim 27.

Response to Arguments

22.   The Applicant's arguments filed on 3/8/2004 have been considered but are **moot in view of the new grounds for rejection. See new rejection over Sim**. Further, the Applicant argues an Application Programming Interface (API) as claimed is not taught by McCauley. McCauley teaches of a Universal Game Computer Interface (UGCI). Games are equivalent to Application Programs on Computers. Therefore for starters the names of the API and UGCI imply similar function and use. They both are interfaces for Computer Applications. Further McCauley teaches the UGCI may support as many as 127 peripheral devices. Peripheral devices allow a user to interface with an Application Program on a Computer. Therefere the Game Application and the peripheral device are linked by the UGCI. The UGCI receives and transmits information both from and to the peripheral device and host PC, as interfaces are known to do, column 7 lines 64-67, wherein as claimed the UGCI (API) creates a call to the Game Application on the PC host, via the USB port, for processing Game Application Information. If the UGCI of McCauley did not receive a call from the game application to create an association between actions in the application and one of the 127 peripheral devices, a user would not be able to play the game. The Applicant incorrectly interprets what is being considered equivalent to its claimed API. The Examiner asserts the UGCI is equivalent to the applicants API. Further, it would not be practical for a device that supports as many as 1237 peripheral devices not to have a ranking system. The Applicant falsely argues McCauley is not concerned with applications running on the system. As mentioned, the

UGCI is designed to interface applications running on the system (PC host). That which the Applicant claims McCauley's invention is not concerned with is its very purpose for being. Further, inherent to the HID protocol are semantically based communications for genre groups of input devices. Further Chan et al. reads on the Applicants invention as argued above.

Conclusion

23.   The prior art made of record and not relied upon is considered pertinent to applicants disclosure. Sims, III et al. (6349345) and Barile et al. (5977886).

24.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to **David L. Lewis** whose telephone number is **(703) 306-3026**. The examiner can normally be reached on MT and THF from 8 to 5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached on (703) 305-4938. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:
    Commissioner of Patents and Trademarks
    Washington, D.C. 20231
    or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

BIPIN SHALWALA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600